Decision of 14 December 2000

Case Number: T 1108/98 - 3.2.6

Application Number: 92912951.8

Publication Number: 0588916

IPC: A61F 13/49, A61F 13/56

Language of the proceedings: EN

Title of invention:
Absorbent article with fastening system providing dynamic elasticized waistband fit

Patentee:
THE PROCTER & GAMBLE COMPANY

Opponent:
SCA MOLNLYCKE AB

Headword:
Dual tension fastening system/PROCTER & GAMBLE

Relevant legal provisions:
EPC Art. 52, 54, 56, 123

Keyword:
"Amendments - added subject-matter (no)"
"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:
-

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.2.6
of 14 December 2000

Appellant:
SCA MOLNLICKE AB
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Respondent:
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 2 October 1998 rejecting the opposition filed against European patent No. 0 588 916 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: H. Meinders
J. C. M. De Preter
Summary of Facts and Submissions

I. The appeal is from the decision of the Opposition Division of 16 September 1998, sent to the parties on 2 October 1998, rejecting the opposition against European Patent No. 0 588 916.

From the opposition proceedings the following documents are relevant for the present appeal proceedings:


II. Against this decision an appeal was filed by the Appellant (Opponent) on 1 December 1998, with payment of the appeal fee on that same day. The statement of grounds of appeal was filed on 5 February 1999.

III. Oral proceedings were held on 14 December 2000, in which the Appellant requested that the decision under appeal be set aside and the patent revoked.

The Respondent (Patentee) requested that the decision under appeal be set aside and the patent be maintained in amended form on the basis of claims 1 to 28, description pages 1 to 22 and Figures 1 to 9A as submitted during the oral proceedings.

Claim 1 reads as follows:

"1. An absorbent Article (20, 520, 620, 720), having longitudinal edges (62), end edges (64), a first waist region (56), a second waist region (58) opposed to said first waist region, an outer surface (52), an inner
surface (54), the absorbent article comprising:

a containment assembly (22) comprising an outer covering layer (26) and an absorbent core (28) having side edges (82) and waist edges (83, 583, 683), and

a dual tension fastening system (36, 736) is disposed on the absorbent article, said dual tension fastening system comprising:

(i) a primary fastening system (38) for providing a side closure for the absorbent article by maintaining said first waist region (56) and said second waist region (58) in an overlapping configuration such that lateral tension is maintained around the circumference of the absorbent article to maintain the absorbent article on the wearer, said primary fastening system comprising:

(a) a securement member (42) disposed adjacent each of said longitudinal edges in said second waist region (58), and

(b) at least one landing member (44, 544) disposed in said first waist region, said landing member being engageable with said securement members; and

(ii) a waist closure system (40, 740) for providing a variable positioning, passively activated waist closure for the absorbent article that dynamically maintains/creates lateral tension through at least a portion of said waistband, said waist closure system comprising:

(a) at least one first attachment component (46, 746)
disposed in said first waist region, said first attachment component being positioned so as to be longitudinally aligned with said waistband, and

(b) at least one second attachment component (48, 748) disposed in said second waist region, said second attachment component being engageable with said first attachment component so that when the primary closure is formed, said second waist region overlaps said first waist region such that said second attachment component engages said first attachment component at at least two anchor zones (122) longitudinally aligned with said waistband so as to dynamically maintain/create lateral tension though at least a portion of said waistband;

characterised in that an elasticized waistband (34, 534, 634) is disposed longitudinally outwardly from and along a portion of said waist edge of said absorbent core in said first waist region, said elasticized waistband being elastically extensible in at least the lateral direction and in that said anchor zones (122) are longitudinally spaced from the primary fastening system in a direction towards the end edges (64)."

IV. The arguments of the Appellant can be summarised as follows:

D1 constituted the closest prior art, disclosing an absorbent article with the features of the preamble of claim 1. The diaper had a fastening system forming a dual tension system, because the inner and outer fastening means performed, in use of the diaper, their function at different longitudinal and lateral locations.
The features by which claim 1 distinguished itself from this prior art (the characterising features of claim 1 as amended concerning the arrangement of an elasticized waistband and the anchor zones being longitudinally spaced from the primary fastening means in a direction towards the end edges) were obvious measures in view of the improvement of wearer comfort and leakage prevention, which the skilled person always tried to achieve.

V. The Respondent's submissions can be summarised as follows:

D1 could not be considered as disclosing a dual tension fastening system because the inner fastening means were, in use, longitudinally aligned with the outer fastening means.

Further, the skilled person was not led in an obvious manner by the available prior art to the absorbent article as claimed, which therefore was based on an inventive step. There was no reason for the skilled person to apply the elasticized waistband known from e.g. D7 or D9 to the disposable diaper known from D1, because the latter already solved the problem of improved fit and preventing leakage by the use of inner and outer fastening means. Even if he would do so, the available prior art still did not provide him with the suggestion to further longitudinally space the anchor zones from the primary fastening means in a direction towards the end edges.
**Reasons for the Decision**

1. The appeal is admissible.

2. *Amendments (Articles 84 and 123 EPC)*

   The subject-matter of claim 1 as granted has been further limited by the addition of the feature that the anchor zones are longitudinally spaced from the primary fastening system in a direction towards the end edges of the absorbent article.

   The original application documents provide a basis for this amendment on page 28, lines 12 to 27 and Figure 1.

   The amendment of claim 1 further consists in bringing it into the proper two-part form for the purposes of Rule 29(1) EPC, to acknowledge the closest prior art represented by D1.

   Claims 6, 29 and 30 as granted were deleted in reaction to objections made by the Board in the oral proceedings.

   The description of the patent in suit was adapted to be consistent with the claims as amended.

   The amendments do therefore not give rise to objections in respect of the requirements of Article 84 and Articles 123(2) and (3) EPC.
3. **Novelty (Article 54 EPC)**

Novelty was not an issue between the parties in these appeal proceedings; as none of the documents available in the file on its own discloses all features of claim 1, the Board is satisfied that the subject-matter of claim 1 is novel.

4. **Closest prior art**

4.1 The subject-matter of claim 1 concerns in essence an absorbent article maintained around the waist of the wearer by means of a dual tension fastening system comprising a primary fastening system for providing a side closure for the absorbent article and a waist closure system for providing a variable positioning, passively activated waist closure for the absorbent article when the primary fastening system is formed.

The invention of the patent in suit is concerned with improving comfort of the wearer and maintaining proper fitting of the absorbent article on the wearer so that the risk of leakage is further reduced (see the patent, page 2, lines 38 and 39).

The parties agree that D1 represents the closest prior art for the purposes of the discussing inventive step. The Board follows this opinion and draws attention to the fact that D1 is the only available prior disclosure of an absorbent article with a dual fastening system consisting of a primary and a secondary fastening system as claimed in claim 1. Furthermore, D1 is concerned with the improvement of wearer comfort and the reduction of leakage (see column 1, lines 50 to 52, column 2, lines 46 to 49, column 3, lines 49 to 55).
4.2 The Respondent argued that D1 did not disclose a dual tension fastening system as claimed because the force exerted on the outer fastening means (54) in the direction of the waist circumference, during use of the absorbent article, was also directed through the inner fastening means (60). Thus tension relief in only one direction could be provided, not in two different directions as implied by the wording "dual tension fastening system".

Firstly, it is to be noted that the patent in suit does not define in detail what has to be understood by the term "dual tension fastening system". It certainly does not limit the direction of the forces occurring when the absorbent article is used to the circumferential direction around the waist of the wearer or particularly to those directed through the primary fastening means.

Secondly, the arrangement of the inner and outer fastening means as disclosed in D1 is perfectly capable of providing relief to tensions in different directions. This follows from the fact that the inner fastening means (60) extends further in the longitudinal direction towards the end edge of the article as well as towards its leg opening and is therefore capable of providing tension relief in the circumferential direction at a waist level different from the level at which the outer fastening means (54) is operative.

In particular the inner fastening means (60) is operative in a direction perpendicular to the waist circumferential direction at a location laterally spaced from the location of the outer fastening means.
The forces exerted by leg movement result in relative movement of the front part with respect to the rear part of the absorbent article, giving rise to leakage at the leg openings. These forces creating tension in the absorbent article are operative in a direction perpendicular to the waist circumferential direction. They are effectively counteracted by the inner fastening means (60) (see also column 11, lines 27 to 34).

If "dual tension" as claimed in claim 1 means "tension in two different directions" as argued by the Respondent, then in view of the above the fastening means of the absorbent article disclosed in D1 must be considered as providing such a "dual tension fastening system" as well.

There is no difference of opinion between the parties in respect of the remaining features of the preamble of claim 1. The Board agrees with the parties that these are known from D1.

5. **Inventive step (Article 56 EPC)**

5.1 The absorbent article disclosed in D1, when in use, is positioned around the waist of the wearer and the waist portions are made to overlap. These are fixed to each other by the outer fastening means, the inner fastening means limits and prevents shifting of the overlapping waist portions and maintains a good fit of the article around the legs of the wearer.

However, when connecting the waist portions to each other with the outer fastening means the waist circumferential size of the absorbent article is fixed;
the absorbent article cannot adapt itself to expansion or contraction at the waist region when the wearer breathes, moves or changes positions, unless the outer fastening means is released. This creates discomfort and the possibility of leakage at the waist region.

Furthermore, the inner fastening means (60) extend over the entire width of the waist portions, i.e. from the leg opening to the end edge of the absorbent article. Though effectively preventing the waist portions from shifting this also results in the waist portions of the absorbent article having a section in the hip area which is stiffened by the first and second attachment components cooperating together, which is not comfortable when the legs are moved sideways in an upward direction.

5.2 When starting from the absorbent article disclosed in D1 the object underlying the subject-matter of claim 1 under consideration is therefore to provide an absorbent article with further improved comfort and proper fitting while maintaining leakage prevention (see the patent in suit, page 1, lines 20 to 25 and lines 35 to 41 and page 2, lines 10 to 13).

5.3 The subject-matter of claim 1 differs from the absorbent article disclosed in D1 by the characterising features of claim 1, namely the absorbent article being provided with an elasticized waistband along the waist edge of the absorbent core and the anchoring zones being longitudinally spaced from the primary fastening system in a direction towards the end edges.

These features provide the absorbent article with a more comfortable fit in the waist and the hip region as
well as with leak prevention while properly maintaining the absorbent article on the body of the wearer.

5.4 Document D9 provides the skilled person with the clear indication that an elasticized waistband disposed longitudinally outwardly from and along a waist edge of the absorbent core improves fit and leakage prevention (column 1, lines 12 to 14). The same applies to D7 (see column 1, lines 11 to 16 and 28 to 30, as well as column 2, lines 52 to 58).

5.5 The Respondent argued that the absorbent article according to D1 already solved the problems of proper fitting and leakage prevention and that therefore there was no need for the skilled person to further improve the absorbent article by including an elasticized waistband.

The Board is, however, of a different opinion. Improving comfort, proper fitting and leakage prevention is continuously in the mind of the skilled person operating in the field of absorbent articles. Any development providing a further solution to the above mentioned objectives will be closely studied by the skilled person. Such a development is illustrated by D7 and D9 in the form of the provision of an elasticized waistband.

The skilled person will recognise the advantages of such a waistband in providing more space in the waist region when needed. It therefore does not require inventive skills to apply the teaching of either document to the absorbent article known from D1.

5.6 Though the mere arranging of an elasticized waistband
in the absorbent article of D1 would not require inventive skills, none of the other available documents reflecting the prior art, however, provide the person skilled in the art with the indication that it would be advantageous to additionally arrange the anchor zones of the waist closure system of the absorbent article disclosed in D1 such that they are longitudinally spaced from the primary fastening means in a direction towards the end edges of the absorbent article.

With this feature two longitudinally distinct zones of tension are guaranteed. The zone of tension generated by the primary fastening means secures the absorbent article on the body of the wearer; the zone of tension created and maintained by the waist closure system involving the elasticized waistband and the anchor zones dynamically maintains the waist edge of the absorbent article closed during wear (see page 11, lines 8 to 31).

The closure system of D1 does not allow for such separated zones of lateral tension, thus cannot render this solution obvious either.

5.7 In the Board's judgement the solution to the technical problem underlying the patent in suit as defined in the present independent claim 1 therefore involves inventive step. Therefore this claim as well as the dependent claims 2 to 28, defining preferred embodiments of the sanitary napkin of claim 1 in accordance with Rule 29(3) EPC, can form the basis for maintenance of the patent (Article 52(1) EPC).

The amended description and the drawings of the patent in suit are in agreement with the present wording and
scope of the claims.

Thus, taking account of the amendments made by the Appellant, the patent and the invention to which it relates meet the requirements of the EPC (Article 102(3) EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent on the basis of the following documents filed during the oral proceedings of 14 December 2000:

   Claims: 1 to 28,

   Description: pages 2 to 22,

   Figures: 1 to 9A.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau